# RECEIVED CENTRAL FAX CENTER

# BEST AVAILABLE COPY

JAN 1 8 2007

#### IN THE CLAIMS:

1. (Currently Amended) An automatic index making system for an electronic catalog, comprising:

an object input section configured to enter [[an]] a three-dimensional image object which enables generation of at least two or more different images by setting a virtual view point to read an image;

a generated image specification section configured to output specified information;

a two-dimensional image generation section configured to electronically analyze the image object entered by the object input section, based on the specified information from the generated image specification section to generate a two-dimensional thumbnail image;

an index data creation section configured to create index data by use of the two-dimensional thumbnail image generated by the two-dimensional image generation section; and

an index output section configured to output an index by use of the index data created by the index data creation section, the index including the two-dimensional thumbnail image.

- (Original) The apparatus according to claim 1, wherein the specified information includes presence information of one of an object in the image object and a part of the object.
- 3. (Original) The apparatus according to claim 1, wherein the specified information includes whether or not an object in the image object is a preset spatial posture.

## **BEST AVAILABLE COPY**

- 4. (Original) The apparatus according to claim 3, wherein the spatial posture includes at least one of a front, an upper surface, a side face and a perspective surface of the object.
- 5. (Original) The apparatus according to claim 1, wherein the specified information includes illumination information of the image object.
  - 6. (Canceled)
- 7. (Original) The apparatus according to claim 1, wherein the two-dimensional image generation section includes a function of synthesizing a background.
- 8. (Original) The apparatus according to claim 1, wherein the two-dimensional image generation section generates at least two or more different two-dimensional images for one of the image objects, and

the index data creation section extracts one of the different two-dimensional images to use it as index data.

9. (Original) The apparatus according to claim 1, wherein the two-dimensional image generation section generates at least two or more different two-dimensional images for one of the image objects, and

the index data creation section creates index data corresponding to the at least two or more different two-dimensional images for one of the image objects.

10. (Original) The apparatus according to claim 9, wherein at least one display image size is different among the two-dimensional images in the index data.

## BEST AVAILABLE COPY

11. (Original) The apparatus according to claim 1, wherein the twodimensional image generation section includes a function of correcting data of at least one of the image object and a copy of the image object based on a result of electronically analyzing the image object.

12. (Original) The apparatus according to claim 1, wherein

- the image object is a three-dimensional image, and
  a target of the correction includes at least one of a spatial origin coordinate of
  the image object, inclination of a spatial coordinate axis, a luminance value, a color, a
  coefficient of reflection, a light emission coefficient of the object, the number of polygons, an
  initial spatial position, and illumination conditions of the object.
- 13. (Original) The apparatus according to claim 1, wherein the index output section further includes a function of electronically searching an image object similar to the image object.
- 14. (Original) The apparatus according to clam 1, wherein the index output section searches the similar image object by using a characteristic amount of the two-dimensional image generated at the two-dimensional image generation section.
- 15. (Original) The apparatus according to claim 1, wherein the index output section includes a function of outputting the index as a paper medium.
- 16. (Original) The apparatus according to claim 1, wherein the twodimensional image generation section uses a recognition algorithm to recognize specific

## **BEST AVAILABLE COPY**

characteristics in the image object to electronically analyze the image object entered by the object input section.

- 17. (Original) The apparatus according to claim 1, wherein the two-dimensional image generation section uses an algorithm to read and analyze information added to the image object entered by the object input section to electronically analyze the image object.
- 18. (Currently Amended) An automatic index making method for an electronic catalog, comprising:

entering [[an]] <u>a three-dimensional</u> image object which enables generation of at least two or more different images by setting a virtual view point to read an image;

outputting specified information;

electronically analyzing the entered image object based on the specified information to generate a two-dimensional <u>thumbnail</u> image;

creating index data by using the generated two-dimensional <u>thumbnail</u> image; and

outputting an index by using the created index data, the index including the two-dimensional thumbnail image.

19. (Canceled)

RECEIVED
CENTRAL FAX CENTER

### BEST AVAILABLE COPY

JAN 1 8 2007

#### **IN THE ABSTRACT:**

Please amend the Abstract of the Disclosure as follows. A clean copy of the Abstract is enclosed for the convenience of the Examiner.

#### ABSTRACT OF THE DISCLOSURE

An automatic index making system for an electronic catalog is disclosed. The system generates a two-dimensional thumbnail image used for an electronic catalog from an entered three-dimensional image object by using specified information. The specified information can be, but not limited to, the condition that specific part of the three-dimensional image object appears on the two-dimensional thumbnail image, or the condition that object in the two-dimensional thumbnail image has a specific orientation. The system analyzes the three-dimensional image object based on the specified information, generates twodimensional thumbnail image, and outputs an index that incorporates the two-dimensional image, comprises an object input section configured to enter an image object which enables generation of at least two or more different images by setting a virtual view point to read an image, a generated image specification section configured to output specified information, and a two-dimensional image generation section configured to electronically analyze the image object entered by the object input section, based on the specified information from the generated image specification section to generate a two dimensional image. The system further comprises an index data creation section configured to create index data by use of the two dimensional image generated by the two-dimensional image generation section, and an index output section configured to output an index by use of the index data created by the index data creation section.